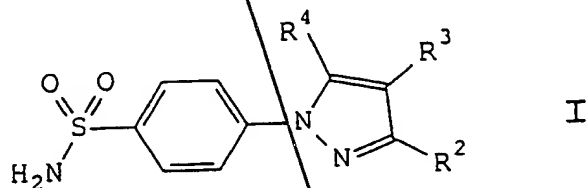


What is claimed is:

1. A method of treating an dementia in a subject, said method comprising treating the subject with a therapeutically-effective amount of a compound of Formula I



wherein R² is selected from hydrido, alkyl, haloalkyl, alkoxycarbonyl, cyano, cyanoalkyl, carboxyl, aminocarbonyl, alkylaminocarbonyl, cycloalkylaminocarbonyl, arylaminocarbonyl, carboxyalkylaminocarbonyl, carboxyalkyl, aralkoxycarbonylalkylaminocarbonyl, alkoxycarbonylcyanoalkenyl and hydroxyalkyl;

wherein R³ is selected from hydrido, alkyl, cyano, hydroxyalkyl, cycloalkyl, alkylsulfonyl and halo; and

wherein R⁴ is selected from aralkenyl, aryl, cycloalkyl, cycloalkenyl and heterocyclic; wherein R⁴ is optionally substituted at a substitutable position with one or more radicals selected from halo, alkylthio, alkylsulfonyl, cyano, nitro, haloalkyl, alkyl, hydroxyl, alkenyl, hydroxyalkyl, carboxyl, cycloalkyl, alkylamino, dialkylamino, alkoxycarbonyl, aminocarbonyl, alkoxy, haloalkoxy, sulfamyl, heterocyclic and amino;

or a pharmaceutically-acceptable salt or derivative thereof.

2. The method of Claim 1 wherein R² is selected from hydrido, C₁-C₁₀-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxycarbonyl, cyano, C₁-C₆-cyanoalkyl, carboxyl, aminocarbonyl, N-C₁-C₆-alkylaminocarbonyl, C₃-C₇-cycloalkylaminocarbonyl,

arylaminoacarbonyl, carboxy-C₁-C₆-alkylaminocarbonyl, aryl-C₁-C₆-alkoxycarbonylalkylaminocarbonyl, carboxy-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonylcianoalkenyl and C₁-C₆-hydroxyalkyl; wherein R³ is selected from hydrido, C₁-C₁₀-alkyl, cyano, C₁-C₆-hydroxyalkyl, C₃-C₇-cycloalkyl, C₁-C₆-alkylsulfonyl and halo; and wherein R⁴ is selected from aralkenyl, aryl, cycloalkyl, cycloalkenyl and heterocyclic; wherein R⁴ is optionally substituted at a substitutable position with one or more radicals selected from halo, C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyl, cyano, nitro, C₁-C₆-haloalkyl, C₁-C₁₀-alkyl, hydroxyl, C₂-C₆-alkenyl, C₁-C₆-hydroxyalkyl, carboxyl, C₃-C₇-cycloalkyl, N-C₁-C₆-alkylamino, di-N-C₁-C₆-alkylamino, C₁-C₆-alkoxycarbonyl, aminocarbonyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, sulfamyl, five or six membered heterocyclic and amino; or a pharmaceutically-acceptable salt or derivative thereof.

3. The method of Claim 2 wherein the compound is selected from compounds, and their pharmaceutically acceptable salts, of the group consisting of

- 4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-phenyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(4-fluorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(4-methoxyphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(4-chlorophenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[4-chloro-5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[3-(difluoromethyl)-5-(4-methylphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;

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4-[3-(difluoromethyl)-5-phenyl-1H-pyrazol-1-yl]benzenesulfonamide;
4-[3-(difluoromethyl)-5-(4-methoxyphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[3-cyano-5-(4-fluorophenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[3-(difluoromethyl)-5-(3-fluoro-4-methoxyphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(3-fluoro-4-methoxyphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[4-chloro-5-phenyl-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(4-chlorophenyl)-3-(hydroxymethyl)-1H-pyrazol-1-yl]benzenesulfonamide; and
4-[5-(4-(N,N-dimethylamino)phenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide.

4. The method of Claim 2 wherein the compound is 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

5. The method of Claim 2 wherein the compound is 4-[5-(4-chlorophenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

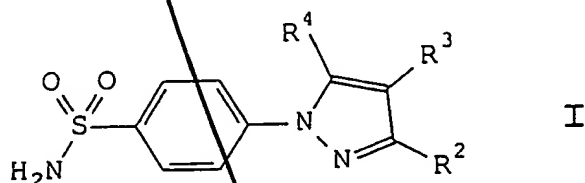
6. The method of Claim 2 where the compound is 4-[5-(3-fluoro-4-methoxyphenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

7. The method of Claim 1 wherein the dementia is selected from Alzheimer's disease, vascular dementia, multi-infarct dementia, pre-senile dementia, alcoholic dementia, and senile dementia.

8. The method of Claim 7 wherein the dementia is

Sub C1
Cont Alzheimer's disease.

9. A method of preventing a dementia selected from Alzheimer's disease, vascular dementia, multi-infarct dementia, pre-senile dementia, alcoholic dementia, and senile dementia, in a subject in need of such prevention, the method comprising treating said subject with a therapeutically-effective amount of a compound of Formula I



wherein R² is selected from hydrido, alkyl, haloalkyl, alkoxycarbonyl, cyano, cyanoalkyl, carboxyl, aminocarbonyl, alkylaminocarbonyl, cycloalkylaminocarbonyl, arylaminocarbonyl, carboxyalkylaminocarbonyl, carboxyalkyl, aralkoxycarbonylalkylaminocarbonyl, aminocarbonylalkyl, alkoxycarbonylcyanoalkenyl and hydroxyalkyl;

wherein R³ is selected from hydrido, alkyl, cyano, hydroxyalkyl, cycloalkyl, alkylsulfonyl and halo; and

wherein R⁴ is selected from aralkenyl, aryl, cycloalkyl, cycloalkenyl and heterocyclic; wherein R⁴ is optionally substituted at a substitutable position with one or more radicals selected from halo, alkylthio, alkylsulfonyl, cyano, nitro, haloalkyl, alkyl, hydroxyl, alkenyl, hydroxyalkyl, carboxyl, cycloalkyl, alkylamino, dialkylamino, alkoxycarbonyl, aminocarbonyl, alkoxy, haloalkoxy, sulfamyl, heterocyclic and amino;

or a pharmaceutically-acceptable salt or derivative thereof.

10. The method of Claim 9 wherein R² is selected from

hydrido, C₁-C₁₀-alkyl, C₁-C₆-haloalkyl, C₁-C₆-alkoxycarbonyl, cyano, C₁-C₆-cyanoalkyl, carboxyl, aminocarbonyl, C₁-C₆-N-alkylaminocarbonyl, C₃-C₇-cycloalkylaminocarbonyl, arylaminocarbonyl, carboxy-C₁-C₆-alkylaminocarbonyl, aminocarbonyl-C₁-C₆-alkyl, aryl-C₁-C₆-alkoxycarbonylalkylaminocarbonyl, carboxy-C₁-C₆-alkyl, C₁-C₆-alkoxycarbonylcyanoalkenyl and C₁-C₆-hydroxyalkyl; wherein R³ is selected from hydrido, C₁-C₁₀-alkyl, cyano, C₁-C₆-hydroxyalkyl, C₃-C₇-cycloalkyl, C₁-C₆-alkylsulfonyl and halo; and wherein R⁴ is selected from aralkenyl, aryl, cycloalkyl, cycloalkenyl and heterocyclic; wherein R⁴ is optionally substituted at a substitutable position with one or more radicals selected from halo, C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyl, cyano, nitro, C₁-C₆-haloalkyl, C₁-C₁₀-alkyl, hydroxyl, C₂-C₆-alkenyl, C₁-C₆-hydroxyalkyl, carboxyl, C₃-C₇-cycloalkyl, C₁-C₆-N-alkylamino, C₁-C₆-N-dialkylamino, C₁-C₆-alkoxycarbonyl, aminocarbonyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, sulfamyl, five or six membered heterocyclic and amino; or a pharmaceutically-acceptable salt or derivative thereof.

11. The method of Claim 10 wherein the compound is selected from compounds, and their pharmaceutically acceptable salts, of the group consisting of

- 4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-phenyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-fluorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-methoxyphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-chlorophenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;

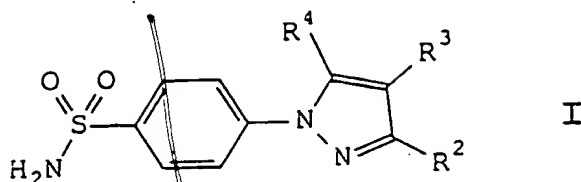
4-[4-chloro-5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[3-(difluoromethyl)-5-(4-methylphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[3-(difluoromethyl)-5-phenyl-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[3-(difluoromethyl)-5-(4-methoxyphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[3-cyano-5-(4-fluorophenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[3-(difluoromethyl)-5-(3-fluoro-4-methoxyphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[5-(3-fluoro-4-methoxyphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[4-chloro-5-phenyl-1H-pyrazol-1-yl]benzenesulfonamide;
 4-[5-(4-chlorophenyl)-3-(hydroxymethyl)-1H-pyrazol-1-yl]benzenesulfonamide; and
 4-[5-(4-(N,N-dimethylamino)phenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide.

12. The method of Claim 10 wherein the compound is 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

13. The method of Claim 10 wherein the compound is 4-[5-(4-chlorophenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

14. The method of Claim 10 where the compound is 4-[5-(3-fluoro-4-methoxyphenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

15. Use of a compound of Formula I



wherein R^2 is selected from hydrido, alkyl, haloalkyl, alkoxycarbonyl, cyano, cyanoalkyl, carboxyl, aminocarbonyl, alkylaminocarbonyl, cycloalkylaminocarbonyl, arylaminocarbonyl, carboxyalkylaminocarbonyl, carboxyalkyl, aralkoxycarbonylalkylaminocarbonyl, alkoxycarbonylcyanoalkenyl and hydroxyalkyl;

wherein R^3 is selected from hydrido, alkyl, cyano, hydroxyalkyl, cycloalkyl, alkylsulfonyl and halo; and

wherein R^4 is selected from aralkenyl, aryl, cycloalkyl, cycloalkenyl and heterocyclic; wherein R^4 is optionally substituted at a substitutable position with one or more radicals selected from halo, alkylthio, alkylsulfonyl, cyano, nitro, haloalkyl, alkyl, hydroxyl, alkenyl, hydroxyalkyl, carboxyl, cycloalkyl, alkylamino, dialkylamino, alkoxycarbonyl, aminocarbonyl, alkoxy, haloalkoxy, sulfamyl, heterocyclic and amino;

or a pharmaceutically-acceptable salt or derivative thereof, for preparing a medicament for treating an dementia in a subject.

16. Use according Claim 15 wherein R^2 is selected from hydrido, C_1 - C_{10} -alkyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxycarbonyl, cyano, C_1 - C_6 -cyanoalkyl, carboxyl, aminocarbonyl, N - C_1 - C_6 -alkylaminocarbonyl, C_3 - C_7 -cycloalkylaminocarbonyl, arylaminocarbonyl, carboxy- C_1 - C_6 -alkylaminocarbonyl, aryl- C_1 - C_6 -alkoxycarbonylalkylaminocarbonyl, carboxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxycarbonylcyanoalkenyl and C_1 - C_6 -hydroxyalkyl; wherein R^3 is selected from hydrido, C_1 - C_{10} -alkyl, cyano, C_1 - C_6 -hydroxyalkyl, C_3 - C_7 -cycloalkyl, C_1 - C_6 -alkylsulfonyl

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4-[5-(4-(N,N-dimethylamino)phenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide.

18. Use according to Claim 16 wherein the compound is 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

19. Use according to Claim 16 wherein the compound is 4-[5-(4-chlorophenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

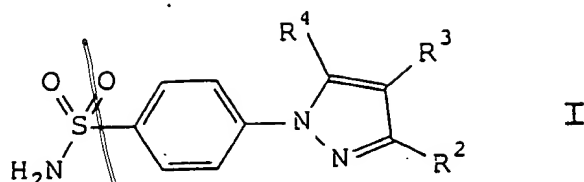
19 20. Use according to Claim 16 where the compound is 4-[5-(3-fluoro-4-methoxyphenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

20 ~~21.~~ Use according to Claim 15 wherein the dementia is selected from Alzheimer's disease, vascular dementia, multi-infarct dementia, pre-senile dementia, alcoholic dementia, and senile dementia.

21 ~~22~~. Use according to Claim 21 wherein the dementia is Alzheimer's disease.

22
23. Use of a compound of Formula I

[illegible]



wherein R^2 is selected from hydrido, alkyl, haloalkyl, alkoxycarbonyl, cyano, cyanoalkyl, carboxyl, aminocarbonyl, alkylaminocarbonyl, cycloalkylaminocarbonyl, arylaminocarbonyl, carboxyalkylaminocarbonyl, carboxyalkyl, aralkoxycarbonylalkylaminocarbonyl, aminocarbonylalkyl, alkoxycarbonylcyanoalkenyl and hydroxyalkyl;

wherein R^3 is selected from hydrido, alkyl, cyano, hydroxyalkyl, cycloalkyl, alkylsulfonyl and halo; and

wherein R^4 is selected from aralkenyl, aryl, cycloalkyl, cycloalkenyl and heterocyclic; wherein R^4 is optionally substituted at a substitutable position with one or more radicals selected from halo, alkylthio, alkylsulfonyl, cyano, nitro, haloalkyl, alkyl, hydroxyl, alkenyl, hydroxyalkyl, carboxyl, cycloalkyl, alkylamino, dialkylamino, alkoxycarbonyl, aminocarbonyl, alkoxy, haloalkoxy, sulfamyl, heterocyclic and amino;

or a pharmaceutically-acceptable salt or derivative thereof, for preparing a medicament for preventing a dementia selected from Alzheimer's disease, vascular dementia, multi-infarct dementia, pre-senile dementia, alcoholic dementia, and senile dementia.

23
24. Use according to Claim 23 wherein R^2 is selected from hydrido, C_1 - C_{10} -alkyl, C_1 - C_6 -haloalkyl, C_1 - C_6 -alkoxycarbonyl, cyano, C_1 - C_6 -cyanoalkyl, carboxyl, aminocarbonyl, C_1 - C_6 -N-alkylaminocarbonyl, C_3 - C_7 -cycloalkylaminocarbonyl, arylaminocarbonyl, carboxy- C_1 - C_6 -alkylaminocarbonyl, aminocarbonyl- C_1 - C_6 -alkyl, aryl- C_1 - C_6 -alkoxycarbonylalkylaminocarbonyl, carboxy- C_1 - C_6 -alkyl, C_1 - C_6 -alkoxycarbonylcyanoalkenyl and C_1 - C_6 -hydroxyalkyl;

wherein R³ is selected from hydrido, C₁-C₁₀-alkyl, cyano, C₁-C₆-hydroxyalkyl, C₃-C₇-cycloalkyl, C₁-C₆-alkylsulfonyl and halo; and wherein R⁴ is selected from aralkenyl, aryl, cycloalkyl, cycloalkenyl and heterocyclic; wherein R⁴ is optionally substituted at a substitutable position with one or more radicals selected from halo, C₁-C₆-alkylthio, C₁-C₆-alkylsulfonyl, cyano, nitro, C₁-C₆-haloalkyl, C₁-C₁₀-alkyl, hydroxyl, C₂-C₆-alkenyl, C₁-C₆-hydroxyalkyl, carboxyl, C₃-C₇-cycloalkyl, C₁-C₆-N-alkylamino, C₁-C₆-N-dialkylamino, C₁-C₆-alkoxycarbonyl, aminocarbonyl, C₁-C₆-alkoxy, C₁-C₆-haloalkoxy, sulfamyl, five or six membered heterocyclic and amino; or a pharmaceutically-acceptable salt or derivative thereof.

24
25. Use according to Claim 24 wherein the compound is selected from compounds, and their pharmaceutically acceptable salts, of the group consisting of

- 4-[5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-phenyl-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-fluorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-methoxyphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-chlorophenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[4-chloro-5-(4-chlorophenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[3-(difluoromethyl)-5-(4-methylphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
- 4-[3-(difluoromethyl)-5-phenyl-1H-pyrazol-1-yl]benzenesulfonamide;

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4-[3-(difluoromethyl)-5-(4-methoxyphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[3-cyano-5-(4-fluorophenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[3-(difluoromethyl)-5-(3-fluoro-4-methoxyphenyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(3-fluoro-4-methoxyphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide;
4-[4-chloro-5-phenyl-1H-pyrazol-1-yl]benzenesulfonamide;
4-[5-(4-chlorophenyl)-3-(hydroxymethyl)-1H-pyrazol-1-yl]benzenesulfonamide; and
4-[5-(4-(N,N-dimethylamino)phenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide.

25
26. Use according to Claim 24 wherein the compound is 4-[5-(4-methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

26
27. Use according to Claim 24 wherein the compound is 4-[5-(4-chlorophenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

27
28. Use according to Claim 24 where the compound is 4-[5-(3-fluoro-4-methoxyphenyl)-3-(difluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide, or a pharmaceutically-acceptable salt thereof.

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